



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**



**Thomas S. Burack, Commissioner**

April 10, 2007

The Honorable Martha Fuller Clark, Chairman  
Energy, Environment, and Economic Development Committee  
Legislative Office Building Room 106  
Concord, NH 03301

**RE: House Bill 216 relative to establishing a commission to study the causes, effects, and remediation of siltation in the Great Bay Estuary.**

Dear Madam Chairman and Members of the Committee:

Thank you for the opportunity to comment on HB 216, which would establish a commission to study the causes, effects, and remediation of siltation in the Great Bay Estuary. The Department of Environmental Services (DES) supports this study commission as a means to promote greater understanding and evaluation of this issue and as a step toward identifying possible long term solutions.

Siltation in the Great Bay Estuary is a significant issue that is not well understood. The historic scientific data trends suggest that sediment loads from the Bay's five tributary rivers have increased over time and have had negative impacts. The available information demonstrating that water quality degradation by siltation is a problem includes:

1. Studies by the University of New Hampshire (UNH) have indicated that for the period from 1994 to 2004 total suspended solid (TSS) loads nearly doubled in the Oyster River and increased by approximately 20% in three other major tributaries.
2. After the May 2006 floods, UNH researchers observed over 2 inches of mud deposited over newly planted oysters in the Bellamy River.
3. The New Hampshire Estuaries Project (NHEP) has documented a 17% loss in expanse of eelgrass since 1996 and UNH researchers have hypothesized that this is likely due to excessive silt or organic loadings.
4. The water depths in the southeastern part of Great Bay have been qualitatively observed by boaters to be decreasing while mud flat areas are expanding.
5. A Squamscott River dredge project has recently been completed and dredging of the Cocheco River is currently underway to restore historic river channels filled by sediment over many years.

Great Bay Estuary siltation is an issue that has been a long term priority for DES and that we continue to address in a number of ways. For example, we have recently:

1. Recommended that the environmental impacts of sediment be made a high priority for the New Hampshire Dredge Management Task Force as a focus for discussion in 2007-2008.

DES Web site: [www.des.nh.gov](http://www.des.nh.gov)

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2. Requested that the Army Corps of Engineers conduct "hydrographic condition surveys" for the Lamprey and Squamscott Rivers to expand upon work recently completed for the Bellamy and Oyster Rivers.
3. Initiated requests for additional studies seeking funding from EPA, Army Corps of Engineers and other potential grant sources.

These efforts by DES, and other efforts by the NHEP and the Dredge Management Task Force, complement well the work of the proposed commission, should it be established. Additional discussion and study at the legislative policy level will elevate awareness of the problem of siltation in the Great Bay Estuary and set the stage for consideration of viable, long term solutions.

Again, thank you for the opportunity to participate in the discussion of this important issue. Please call me at 271-3503, or Ted Diers at 271-7940, if you have any questions or need additional information.

Sincerely,



Thomas S. Burack  
Commissioner

cc: Representative Spang  
Representative Abbott  
Representative Rous  
Representative Wall  
Representative Kaen  
Senator Hassan